

FIGURE 1

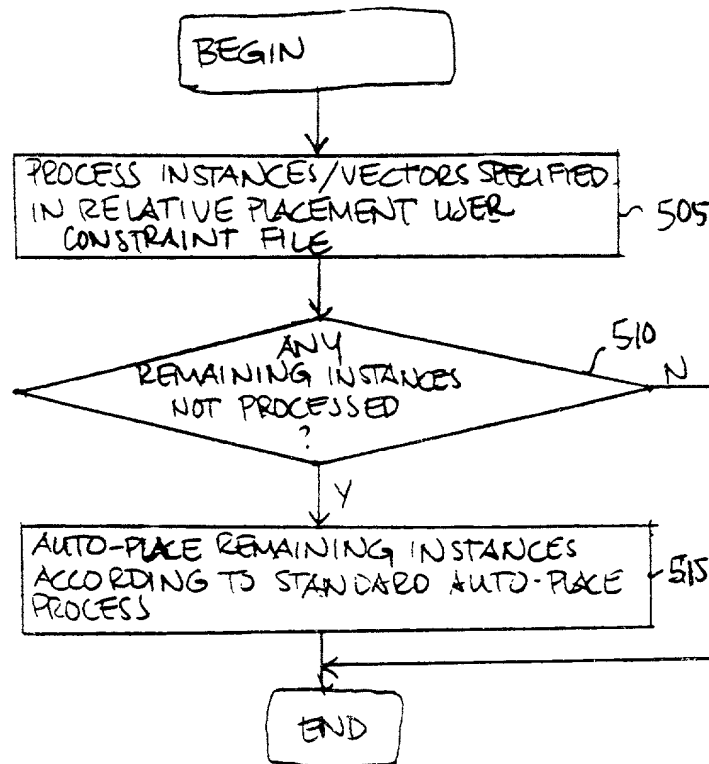


FIGURE 5

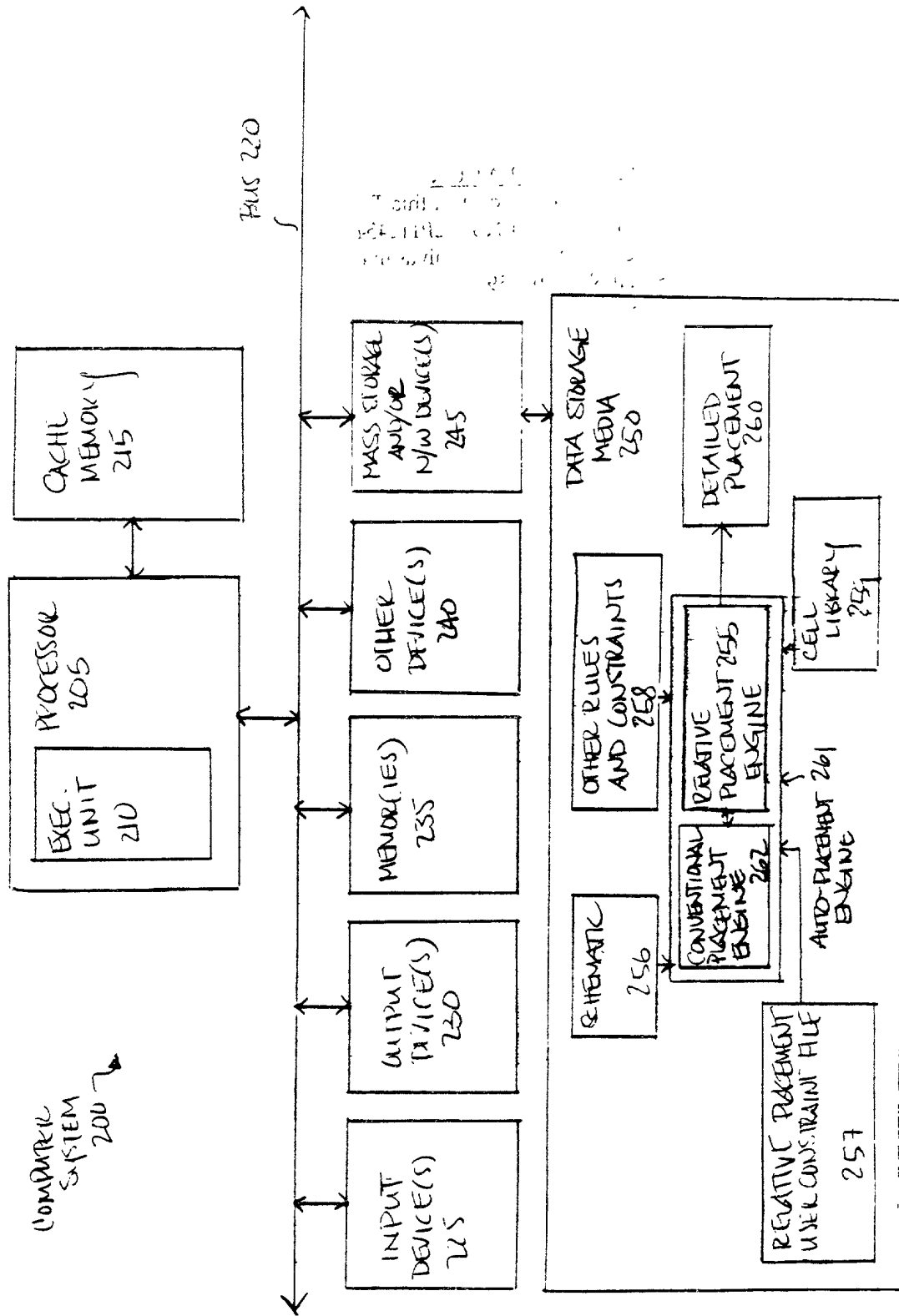


FIGURE 2

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graph TD
    BEGIN([BEGIN]) --> 305[LOAD IC SCHEMATIC]
    305 --> 310[SELECT AND LOAD LEAF OR OTHER CELL FILE(S)]
    310 --> 315[SMASH CELL(S) TO FLATTEN SCHEMATIC HIERARCHY TO CREATE LAYOUT VIEW]
    315 --> 320[LOAD RELATIVE PLACEMENT USER CONSTRAINT FILE FOR SELECTED CELL(S)]
    320 --> 325[AUTOMATICALLY VECTORIZE SMASHED CELL(S) FOLLOWING USER CONSTRAINTS TO PRODUCE DETAILED PLACEMENT]
    325 --> 330[OUTPUT DETAILED PLACEMENT]
    330 --> 335{MODIFICATIONS NEEDED?}
    335 -- Y --> 340[MODIFY REL. PLACEMENT USER CONSTRAINT FILE]
    340 --> 320
    335 -- N --> 345[PERFORM GLOBAL ROUTING, CONGESTION ANALYSIS, PRE-ROUTING & DETAIL ROUTING WITH ITERATIONS AS NEEDED]
    345 --> END([END])
  
```

FIGURE 3

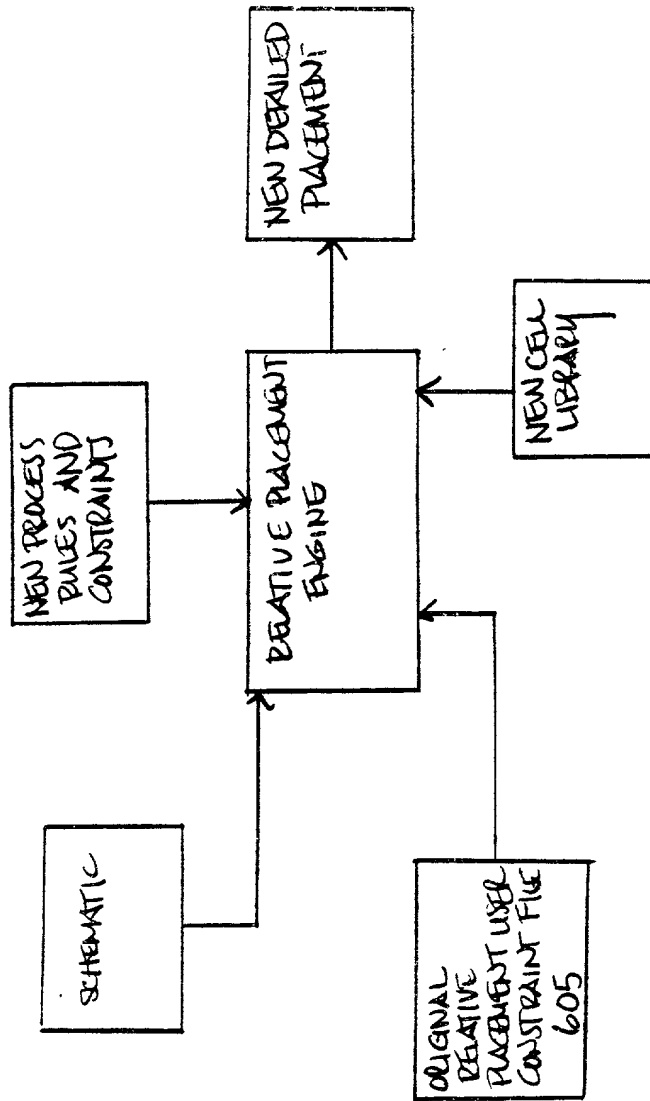


FIGURE 6

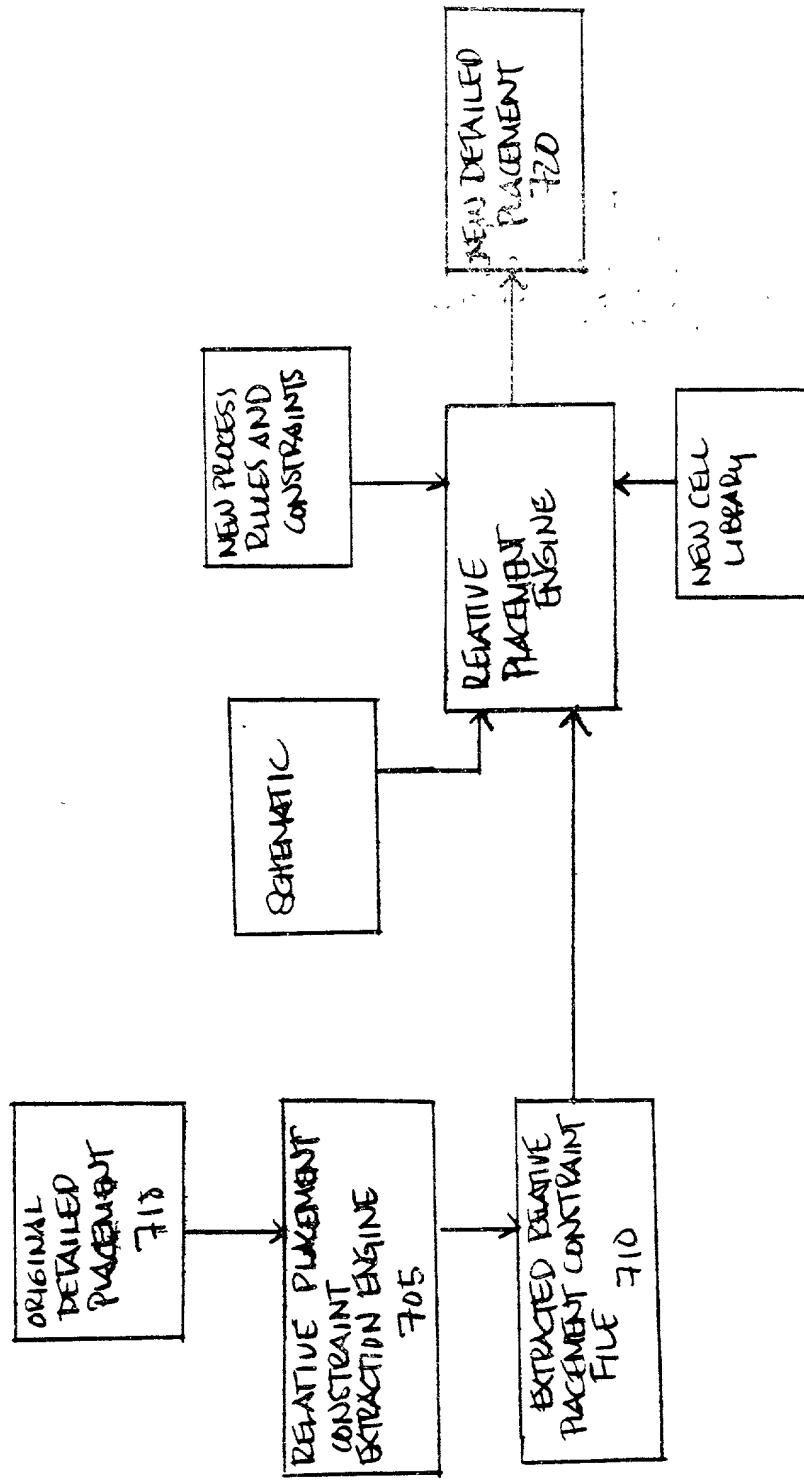


Figure 7